



**FIRE**  
**RESISTING**  
**DOORS AND SHUTTERS**

**Mather & Platt, Ltd.**

MANCHESTER AND LONDON.



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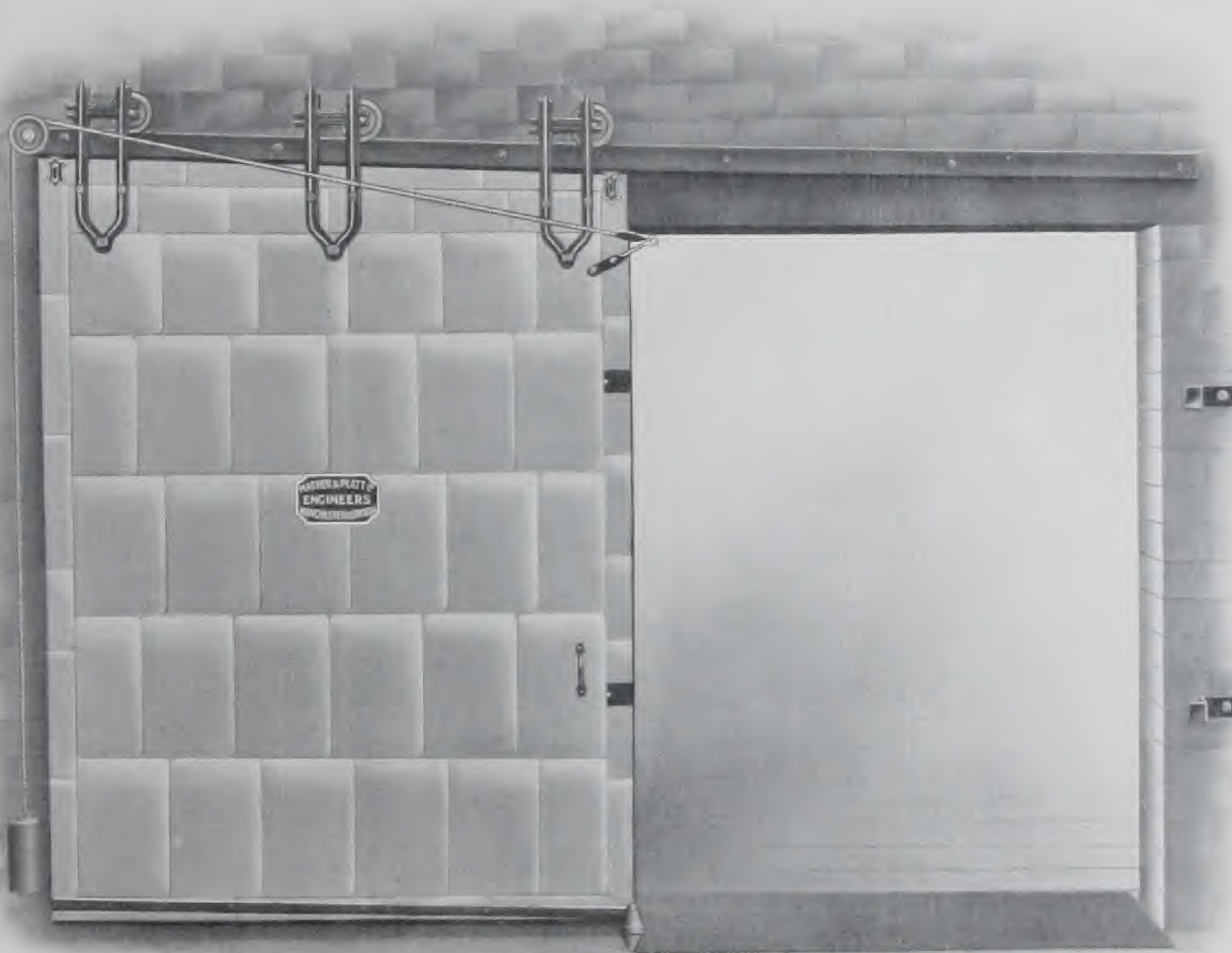


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# Fire Resisting Doors

and Apparatus for  
Automatically Closing in case of Fire.



Armoured Sliding Door, fitted with attachments for Self-Closing in case of Fire.

## Mather & Platt, Ltd

PARK WORKS, MANCHESTER.

QUEEN ANNE'S CHAMBERS, WESTMINSTER, LONDON, S.W.

MAY, 1914.



## FIRE DOORS.

In all well devised schemes of Fire Protection, arrangements are made by means of which, should a fire occur, it may be confined within the narrowest possible limits.

When there are groups of buildings, they are divided into sections by Fire Doors, and the floors of "Fireproof Buildings" are cut off from each other.

Such an arrangement makes for safety, and, if the Fire Doors are efficient, the effect is to divide the premises into a number of what may be termed Fire-tight compartments, which enables the owner to **effect considerable reductions in his Insurance Premiums.**

Formerly, all Fire Doors were constructed of iron or steel only, but the repeated failures of this type of Door when subjected to a fierce fire led to the introduction of the Armoured or Steel Sheathed Wooden Doors.

Their splendid record during that period is well known, and they are accepted as satisfactory "cut-offs" by all British and most Continental Fire Insurance Companies.

**ARMoured DOORS** are constructed of three or four thicknesses (according to the area of opening) of well-seasoned pine boards, planed, tongued and grooved, and nailed together with wrought-iron nails which are driven flush and clenched. They are completely covered with tinned-steel sheets, put on in such a manner that, whilst free to expand, they exclude the air and cannot become detached.

**BY EXCLUDING THE ATMOSPHERE** from the wood, combustion is so greatly retarded that an exposure of several hours to the flames results usually in the timber becoming carbonised to the depth of only a fraction of an inch.

Such doors have been repeatedly brought into service in cases of actual fire, and have **never been known to fail.**

**A WARNING.** The splendid success of Armoured Doors has naturally led to **inferior imitations, not in accordance with the Fire Offices' Committee's Specification,** being constructed. It is no exaggeration to say that many of these doors **are worse than useless.** They engender a feeling of safety where no safety exists, and by their failure tend to bring genuine armoured doors into disrepute.



No matter how good a door is, it will be of little use in case of severe fire if the fittings by which it is attached to the wall are not made of such materials and strengths as are capable of sustaining the heavy weight of the door, notwithstanding the softening influence of the fire.

A reference to the list of fittings we supply with our doors will show that wherever practicable we use malleable iron, our experience having proved that this metal is the most suitable, as it does not become distorted under severe heat like wrought iron and steel, and further does not collapse when suddenly cooled by water from the fire jet being thrown upon it.

This has been repeatedly demonstrated in actual fires during the last twenty years and, whilst this class of fitting is slightly more expensive than those made of wrought iron, their known reliability warrants the additional expense.

**MATHER & PLATT, LTD., GUARANTEE** that all their doors and shutters are made in every respect to the specifications of the Fire Offices' Committee.

To meet the requirements of the Insurance Companies, wall openings must have the threshold, jambs and lintel formed of brick, stone or cement.

Iron or rolled steel joist lintels may be fixed, provided they are protected on external faces by at least one inch of concrete.

Sliding, hinged and folding doors can be supplied fitted with our **AUTOMATIC APPARATUS** for self-closing in case of fire **at a small extra cost.**

**FIRE SHUTTERS FOR WINDOW OPENINGS.** It has long since been recognised that window openings often play an important part in spreading a fire from one building to another, and that Armoured Shutters, of which we make a speciality, are the best means of guarding against such a contingency. FRANCIS G. MOORE (*President of the Continental Fire Insurance Co. ; Author of "How to Build Fireproof" and "Slow Burning"*), writes :—

"Where window openings are protected by **Iron** Shutters on rear courts, they are almost certain to be warped open by fire in exposed buildings, and cannot be relied upon. The tin-covered wood shutters alone are reliable. There is no recorded instance in which a solid iron door, exposed to the full effect of fire in an adjoining building, has protected the opening, whereas there is on the other hand no instance in which the Underwriter (the tin-steel covered) Door has failed to serve its purpose, two important facts which are significant and ought to settle the question."

**TRAP DOORS.** When trap door openings occur in a building it is very necessary that the doors to same be made as fire-resisting as possible. For this purpose we manufacture special Armoured Trap Doors fitted with attachments to make them self-closing in case of fire. The London and North-Western Railway Company have adopted a large number of these Armoured Trap Doors.



## **Armoured Fire Door**

STAYS THE PROGRESS OF A FIRE.



Armoured Door which effectually prevented a fire from spreading at Messrs. Eastman's Dye Works, Acton, London.

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**Messrs. EASTMAN & SON.**

"We beg to inform you that the Armoured Doors which you fixed on each side of a party wall in these Works in 1900, answered well in the severe fire which has lately destroyed a section of our Works. They stayed the progress of the flames at the party wall, and we are well satisfied with their behaviour."



# Armoured Sliding Fire Doors.

## PRICE LIST.

Height of Door. ft. in.		Height of Opening. ft. in.		WIDTH OF DOOR.																																									
				WIDTH OF OPENING.																																									
				3ft. 3in.	3ft. 6in.	3ft. 9in.	4ft. 0in.	4ft. 3in.	4ft. 6in.	4ft. 9in.	5ft. 0in.	5ft. 3in.	5ft. 6in.	5ft. 9in.	6ft. 0in.	6ft. 3in.	6ft. 6in.																												
				2ft. 9in.	3ft. 0 in.	3ft. 3in.	3ft. 6in.	3ft. 9in.	4ft. 0in	4ft. 3in.	4ft. 6in.	4ft. 9in.	5ft. 0in.	5ft. 3in.	5ft. 6in.	5ft. 9in.	6ft. 0in.																												
				£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.																											
5	3	5	0	6	2	0	6	5	6	5	9	0	6	12	6	6	16	0	6	19	6	7	3	0	7	6	6	8	2	6	8	6	0	8	9	6	8	13	0	8	16	6	9	0	0
5	6	5	3	6	4	2	6	7	10	6	11	6	6	15	2	6	18	10	7	2	6	7	6	2	7	9	10	8	6	0	8	9	8	8	13	4	8	17	0	9	0	8	9	4	4
5	9	5	6	6	6	4	6	10	2	6	14	0	6	17	10	7	1	8	7	5	6	7	9	4	7	13	2	8	9	6	8	13	4	8	17	2	9	1	0	9	4	10	9	8	8
6	0	5	9	6	8	6	6	12	6	6	16	6	7	0	6	7	4	6	7	8	6	7	12	6	7	16	6	8	13	0	8	17	0	9	1	0	9	5	0	9	9	0	9	13	0
6	3	6	0	6	10	8	6	14	10	6	19	0	7	3	2	7	7	4	7	11	6	7	15	8	7	19	10	8	16	6	9	0	8	9	4	10	9	9	0	9	13	2	10	17	6
6	6	6	3	6	12	10	6	17	2	7	1	6	7	5	10	7	10	2	7	14	6	7	18	10	8	3	2	9	0	0	9	4	4	9	8	8	9	13	0	10	17	6	11	2	9
6	9	6	6	6	15	0	6	19	6	7	4	0	7	8	6	7	13	0	7	17	6	8	2	0	8	6	6	9	3	6	9	8	0	9	12	6	10	17	3	11	2	6	11	7	9
7	0	6	9	6	17	2	7	1	10	7	6	6	7	11	2	7	15	10	8	0	6	8	5	2	8	9	10	9	7	0	9	11	8	10	16	6	11	2	0	11	7	6	11	13	0
7	3	7	0	6	19	4	7	4	2	7	9	0	7	13	10	7	18	8	8	3	6	8	8	4	8	13	2	9	10	6	9	15	4	11	1	0	11	6	9	11	12	6	11	18	0
7	6	7	3	7	1	6	7	6	6	7	11	6	7	16	6	8	1	6	8	6	0	8	11	6	8	16	6	9	14	0	10	19	6	11	5	6	11	11	6	11	17	3	12	3	3
7	9	7	6	7	3	8	7	8	10	7	14	0	7	19	2	8	4	4	8	9	6	8	14	8	8	19	10	10	17	9	11	4	0	11	10	3	11	16	3	12	2	4	12	8	6
8	0	7	9	7	5	10	7	11	2	7	16	6	8	1	10	8	7	2	8	12	6	8	17	10	9	3	2	11	2	0	11	8	3	11	14	9	12	1	0	12	7	4	12	13	9
8	3	8	0	7	8	0	7	13	6	7	19	0	8	4	6	8	10	0	8	15	6	9	1	0	10	7	0	11	6	3	11	12	6	11	19	3	12	5	9	12	12	4	12	18	9
8	6	8	3	7	10	2	7	15	10	8	1	6	8	7	2	8	12	10	8	18	6	9	4	2	10	11	0	11	10	3	11	17	0	12	3	9	12	10	6	12	17	0	13	4	0
8	9	8	6	7	12	4	7	18	2	8	4	0	8	9	10	8	15	8	9	1	6	10	8	0	10	15	0	11	14	6	12	1	3	12	8	6	12	15	3	13	2	0	13	8	9
9	0	8	9	7	14	6	8	0	6	8	6	6	8	12	6	8	18	6	9	4	6	10	11	9	10	19	0	11	18	6	12	5	9	12	12	9	13	0	0	13	7	0	13	14	3
9	3	9	0	7	16	8	8	2	10	8	9	0	8	15	2	9	1	4	9	8	3	10	15	6	11	3	0	12	3	0	12	10	0	12	17	3	13	4	9	13	12	4	13	19	3
Three Thickness Doors.																Four Thickness Doors.																													

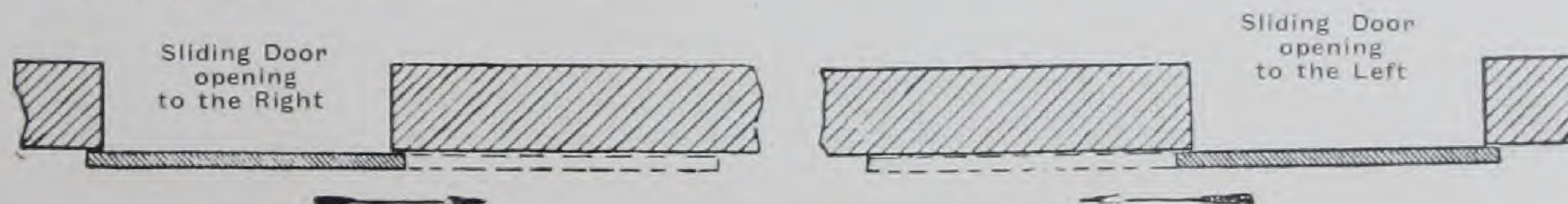
Doors for Openings not exceeding 35ft. in area are constructed of three thicknesses; exceeding 35ft. four thicknesses of timber.

If the sides or head of Doorway are built of Bull-nosed Bricks, allow 4½in. or 6in. instead of 3in. lap.

If fitted with Automatic Apparatus for Self-closing in case of fire, 15/- per door extra.

**Sliding Door Fittings.**—The above prices include the door constructed as stated on page 2 with two or three (according to width of door) Malleable Iron Frictionless Hangers, with M.I. Pulleys and Steel Pins running in planed grooves, Steel Rail with Rag Bolts, or Wall Bricks, and Washers for attaching to wall, two M.I. Door Stops and Bricks, M.I. Guide Roller and Bracket, two M.I. Jumper Brackets and Wedge, two lengths of Convex Iron for back and front of Door, M.I. Sunk and Bow Handles and all the necessary Bolts for attaching the fittings.

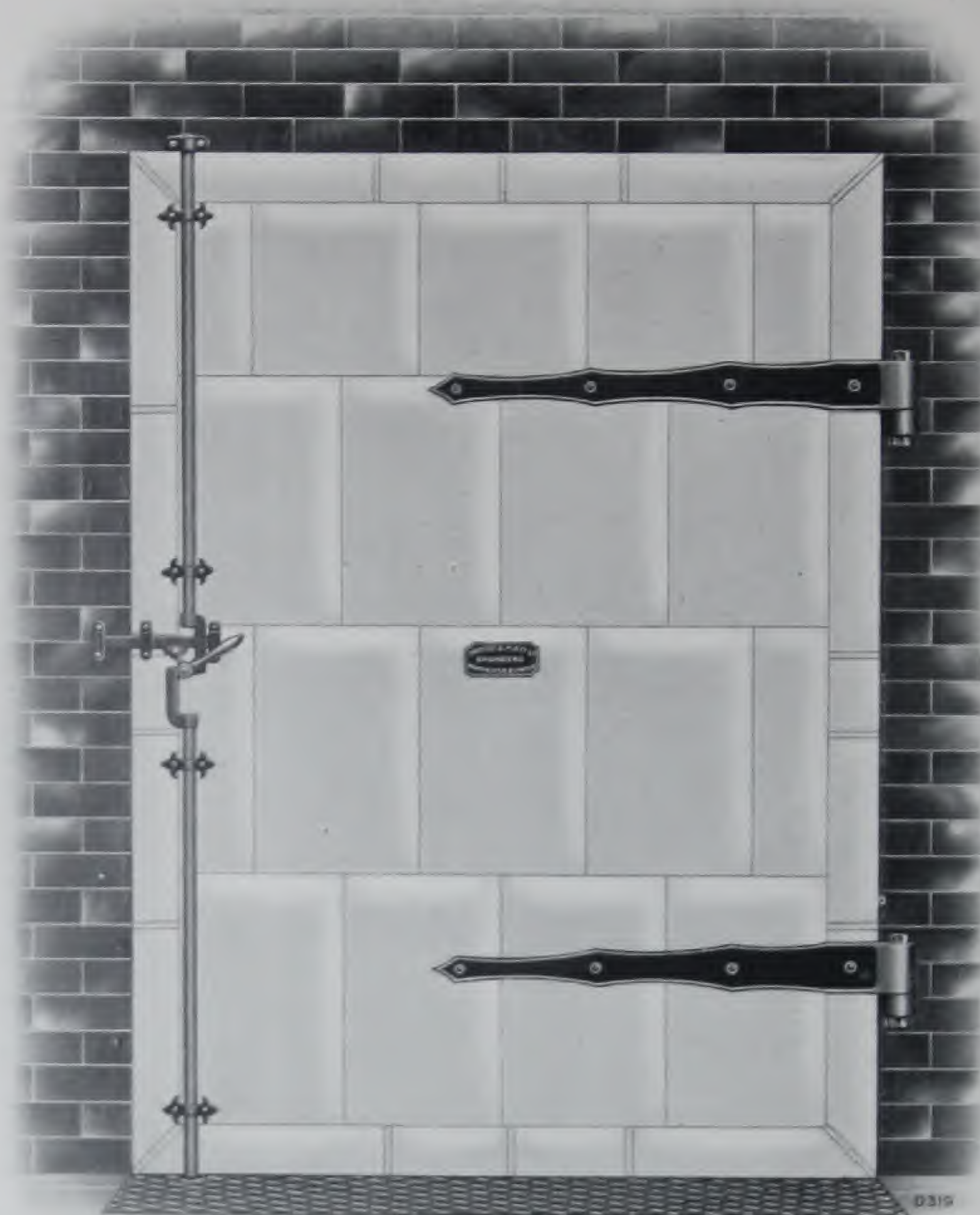
**N.B.**—Armoured Doors meet the regulations of the Fire Offices' Committee for openings of an area of 56 superficial square feet; this being the maximum size of opening allowed for fire doors.



For Doors to London County Council requirements in party walls, special fittings are required entailing a slight extra cost.



## **Armoured Hinged Fire Doors.**



**ARMoured HINGED DOOR.**

Messrs. JOHN ISMAY & SONS, Wholesale Druggists, Newcastle-on-Tyne.

Mr. M. P. Ismay, of the above firm, writes:—"In 1902 I built a large warehouse and offices in the City Road. The building was divided by a brick wall, and on each floor (five floors) one of your Fire-proof Doors was fixed. On Tuesday night (23rd April, 1907) a fire took place, and a portion of the warehouse was entirely gutted in a very short time. When I saw it, the place was like a furnace, and I made up my mind that the entire building was doomed, but your doors saved the larger portion. Everyone who saw the fire (including the firemen) was astonished at the way your doors resisted the fire, and I think it only right to let you know that they saved me no end of trouble, worry and money."



# Armoured Hinged Fire Doors.

## PRICE LIST.

Height of Door,  Height of Opening.		WIDTH OF DOOR.																																											
		3ft. 3in.	3ft. 6in.	3ft. 9in.	4ft. 0in.	4ft. 3in.	4ft. 6in.	4ft. 9in.	5ft. 0in.	5ft. 3in.	5ft. 6in.	5ft. 9in.	6ft. 0in.	6ft. 3in.	6ft. 6in.																														
		WIDTH OF OPENING.																																											
ft. in.	ft. in.	2ft. 9in.	3ft. 0in.	3ft. 3in.	3ft. 6in.	3ft. 9in.	4ft. 0in.	4ft. 3in.	4ft. 6in.	4ft. 9in.	5ft. 0in.	5ft. 3in.	5ft. 6in.	5ft. 9in.	6ft. 0in.																														
5	3	5	0	4	1	6	4	5	0	4	8	6	4	12	0	4	15	6	4	19	0	5	2	6	5	6	0	5	9	6	5	13	0	5	16	6	6	0	0	6	3	6	6	7	0
5	6	5	3	4	3	8	4	7	4	4	11	0	4	14	8	4	18	4	5	2	0	5	5	8	5	9	4	5	13	0	5	16	8	6	0	4	6	4	0	6	7	8	6	11	4
5	9	5	6	4	5	10	4	9	8	4	13	6	4	17	4	5	1	2	5	5	6	5	8	10	5	12	8	5	16	6	6	0	4	6	4	2	6	8	0	6	11	10	6	13	8
6	0	5	9	4	8	0	4	12	0	4	16	0	5	0	0	5	4	0	5	8	0	5	12	0	5	16	0	6	0	0	6	4	0	6	8	0	6	12	0	6	16	0	7	0	0
6	3	6	0	4	10	2	4	14	4	4	18	6	5	2	8	5	6	10	5	11	0	5	15	2	5	19	4	6	3	6	6	7	8	6	11	10	6	16	0	7	0	1	8	4	6
6	6	6	3	4	12	4	4	16	8	5	1	0	5	5	4	5	9	8	5	14	0	5	18	4	6	2	8	6	7	0	6	11	4	6	15	8	7	0	0	8	4	6	8	9	9
6	9	6	6	4	14	6	4	19	0	5	3	6	5	8	0	5	12	6	5	17	0	6	1	6	6	6	0	6	10	6	6	15	0	6	19	6	8	4	3	8	9	6	8	14	9
7	0	6	9	4	16	8	5	1	4	5	6	0	5	10	8	5	15	4	6	0	0	6	4	8	6	9	4	6	14	0	6	18	8	8	3	5	8	9	0	8	14	6	9	0	0
7	3	7	0	5	11	10	5	16	8	6	1	6	6	6	4	6	11	2	6	16	0	7	0	10	7	5	8	7	10	6	7	15	4	9	1	0	9	6	9	9	12	6	9	18	0
7	6	7	3	5	14	0	5	19	0	6	4	0	6	9	0	6	14	0	6	19	0	7	4	0	7	9	0	7	14	0	8	19	6	9	5	6	9	11	6	9	17	3	10	3	3
7	9	7	6	5	16	2	6	1	4	6	6	6	6	11	8	6	16	10	7	2	0	7	7	2	7	12	4	8	17	9	9	3	9	9	10	3	9	16	3	10	2	3	10	8	6
8	0	7	9	5	18	4	6	3	8	6	9	0	6	14	4	6	19	8	7	5	0	7	10	4	7	15	8	9	2	0	9	8	3	9	14	9	10	1	0	10	7	3	10	13	9
8	3	8	0	6	0	6	6	6	0	6	11	6	6	17	0	7	2	6	7	8	0	7	13	6	8	19	6	9	6	3	9	12	6	9	19	3	10	5	9	10	12	3	10	18	9
8	6	8	3	6	2	8	6	8	4	6	14	0	6	19	8	7	5	4	7	11	0	7	16	8	9	3	6	9	10	3	9	17	0	10	3	9	10	10	6	10	17	0	11	4	0
8	9	8	6	6	4	10	6	10	8	6	16	6	7	2	4	7	8	2	7	14	0	9	0	6	9	7	6	9	14	6	10	1	3	10	8	6	10	15	3	11	2	0	11	8	9
9	0	8	9	6	7	0	6	13	0	6	19	0	7	5	0	7	11	0	7	17	0	9	4	3	9	11	6	9	18	6	10	5	9	10	12	9	11	0	0	11	7	0	11	14	3
9	3	9	0	6	9	2	6	15	4	7	1	6	7	7	8	7	13	10	9	0	2	9	8	0	9	15	6	10	2	9	10	10	0	10	17	3	11	4	9	11	12	3	11	19	3
		Three Thickness Doors.										Four Thickness Doors.																																	

Three Thickness Doors.

Four Thickness Doors.

Doors for Openings not exceeding 35ft. in area are constructed of three thicknesses; exceeding 35ft., four thicknesses of timber.

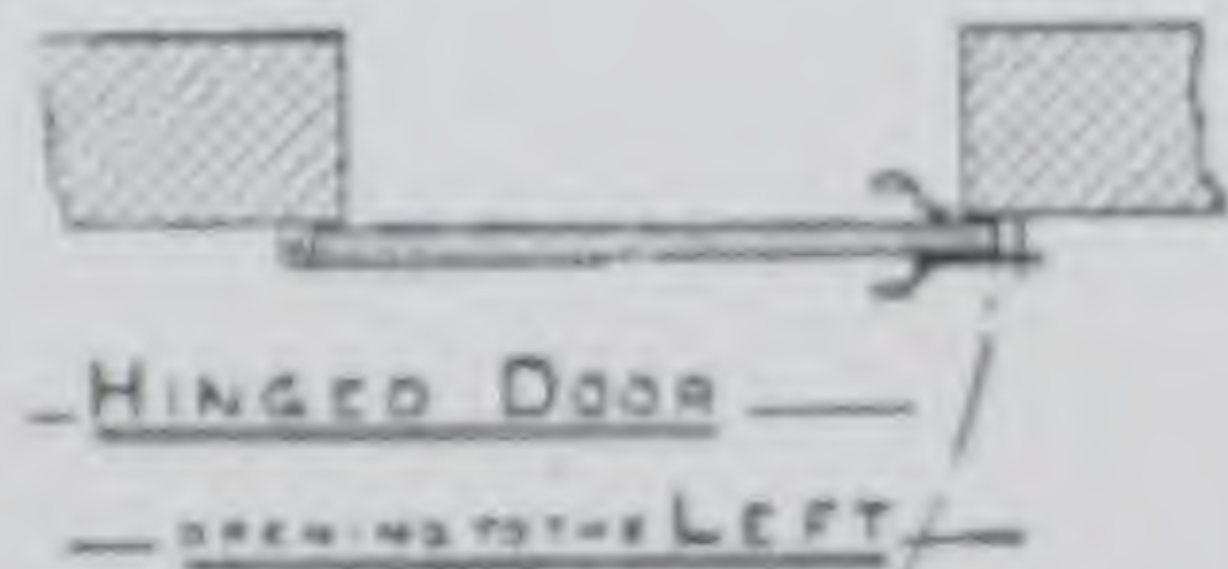
If the sides or head of doorway are built of Bull-nosed bricks, allow 4 1/2 in. or 6 in. instead of 3 in. lap.

If fitted with Automatic Apparatus for Self-closing in case of fire, 20/- per door extra.

The above prices include the Door constructed as stated in general description (see page 2) with two or three (according to height of Door) strong ornamental Malleable Iron Bands, Steel Gudgeons with Turned Steel Pins, Triple Acting Bolt Attachment with Handles, so that this attachment may be operated from both sides, Steel top, bottom and side Receivers and all necessary Bolts for attaching the Fittings to the Doors.

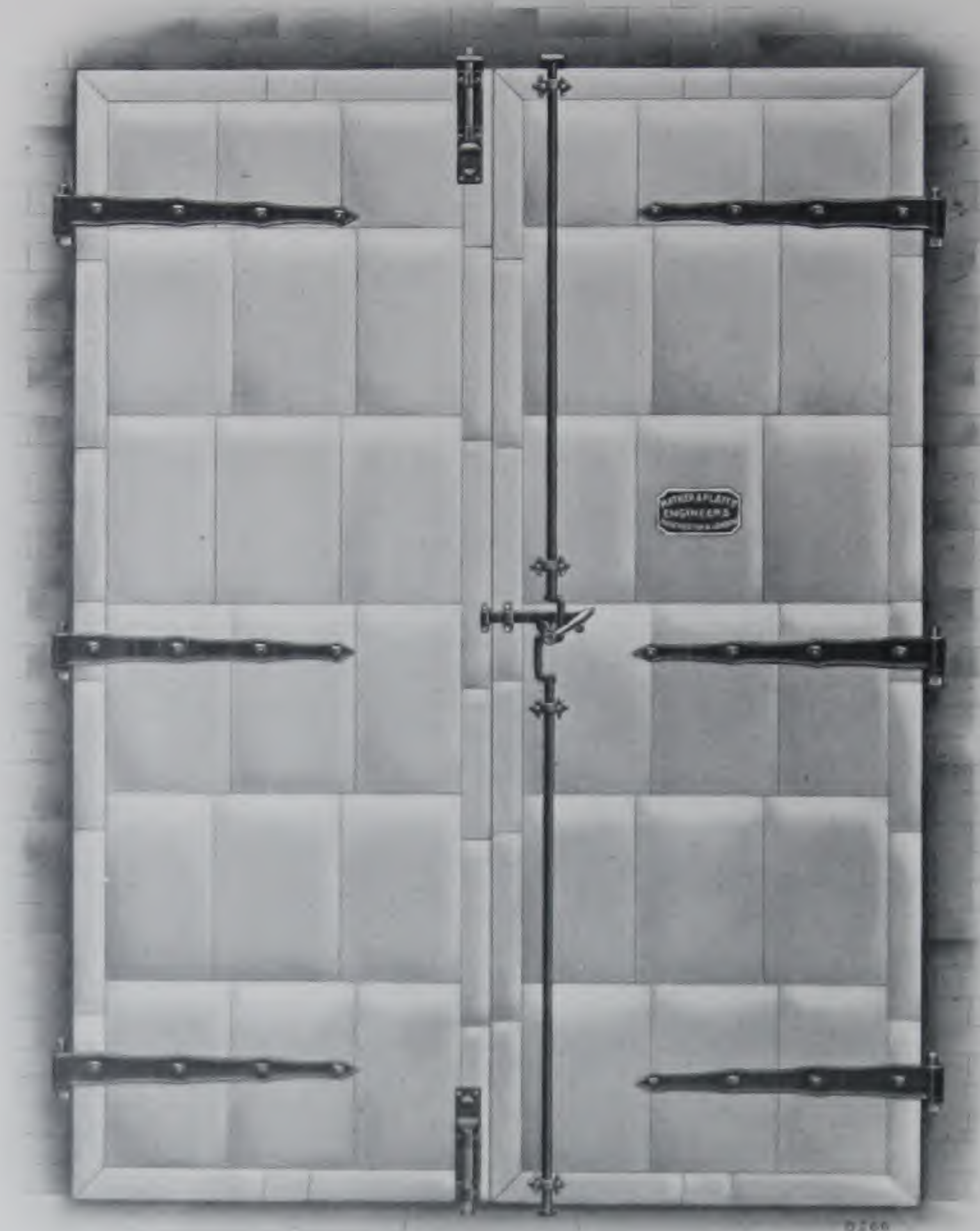
N.B.—Armoured Doors meet the regulations of the Fire Offices' Committee for openings of an area of 56 superficial square feet; this being the maximum size of opening allowed for fire doors.

For Doors to London County Council requirements in party walls, special fittings are required entailing a slight extra cost.





## **Armoured Folding Fire Doors.**



**ARMoured FOLDING DOOR.**

Messrs. HALLIDAY & CONSTANTINE, Golborne, nr. Newton-le-Willows, write:—

"We are pleased to say that two out of the three Armoured Fire-proof Doors that you supplied us with some time ago have stood remarkably well during our recent fire. There was a terrible heat behind them, and yet they stood the strain two or three hours, and practically saved a three-storey building with contents of several thousands of pounds value. If we had not seen for ourselves, we could not have credited the fire-resisting properties of these doors."



## Armoured Folding Fire Doors.

### PRICE LIST.

Height of Door.	Height of Opening.	WIDTH OF DOOR.													
		30. 3in.	30. 6in.	30. 9in.	40. 0in.	40. 3in.	40. 6in.	40. 9in.	50. 0in.	50. 3in.	50. 6in.	50. 9in.	60. 0in.	60. 3in.	60. 6in.
		WIDTH OF OPENING.													
ft.	in.	20. 9in.	30. 0in.	30. 3in.	30. 6in.	30. 9in.	40. 0in.	40. 3in.	40. 6in.	40. 9in.	50. 0in.	50. 3in.	50. 6in.	50. 9in.	60. 0in.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
5	0	5 9 6	5 13 0	5 16 0	6 0 0	6 3 0	6 6 7	6 10 0	6 14 0	6 17 0	7 1 0	7 4 0	7 8 0	7 11 0	7 15 0
5	6	5 11 8	5 15 4	5 19 0	6 2 8	6 6 4	6 10 0	6 13 6	6 17 2	7 1 0	7 4 6	7 8 2	7 11 8	7 15 4	7 19 0
5	9	5 13 10	5 17 6	6 1 2	6 4 8	6 8 4	6 12 0	6 15 6	6 19 2	7 3 0	7 6 6	7 10 2	7 13 8	7 17 4	7 21 0
6	0	5 16 0	6 0 0	6 4 0	6 8 0	6 12 0	6 16 0	6 20 0	6 24 0	6 28 0	7 3 0	7 7 0	7 11 0	7 15 0	7 19 0
6	3	5 18 2	6 2 2	6 6 6	6 10 10	6 14 14	6 18 18	6 22 22	6 26 26	6 30 30	6 34 34	6 38 38	6 42 42	6 46 46	6 50 50
6	6	6 0 4	6 4 8	6 8 12	6 12 16	6 16 20	6 20 24	6 24 28	6 28 32	6 32 36	6 36 40	6 40 44	6 44 48	6 48 52	6 52 56
6	9	6 2 6	6 7 0	6 11 4	6 15 8	6 19 12	6 23 16	6 27 20	6 31 24	6 35 28	6 39 32	6 43 36	6 47 40	6 51 44	6 55 48
7	0	6 4 8	6 9 2	6 13 6	6 18 0	6 22 4	6 26 8	6 30 12	6 34 16	6 38 20	6 42 24	6 46 28	6 50 32	6 54 36	6 58 40
7	3	7 12 10	7 17 4	8 1 8	8 6 12	8 10 16	8 14 20	8 18 24	8 22 28	8 26 32	8 30 36	8 34 40	8 38 44	8 42 48	8 46 52
7	6	7 15 0	8 0 4	8 4 8	8 8 12	8 12 16	8 16 20	8 20 24	8 24 28	8 28 32	8 32 36	8 36 40	8 40 44	8 44 48	8 48 52
7	9	7 17 2	8 2 6	8 6 10	8 10 14	8 14 18	8 18 22	8 22 26	8 26 30	8 30 34	8 34 38	8 38 42	8 42 46	8 46 50	8 50 54
8	0	7 19 4	8 4 8	8 8 12	8 12 16	8 16 20	8 20 24	8 24 28	8 28 32	8 32 36	8 36 40	8 40 44	8 44 48	8 48 52	8 52 56
8	3	8 1 6	8 6 10	8 10 14	8 14 18	8 18 22	8 22 26	8 26 30	8 30 34	8 34 38	8 38 42	8 42 46	8 46 50	8 50 54	8 54 58
8	6	8 3 8	8 8 12	8 12 16	8 16 20	8 20 24	8 24 28	8 28 32	8 32 36	8 36 40	8 40 44	8 44 48	8 48 52	8 52 56	8 56 60
8	9	8 5 10	8 10 14	8 14 18	8 18 22	8 22 26	8 26 30	8 30 34	8 34 38	8 38 42	8 42 46	8 46 50	8 50 54	8 54 58	8 58 62
9	0	8 8 0	8 13 4	8 17 8	8 21 12	8 25 16	8 29 20	8 33 24	8 37 28	8 41 32	8 45 36	8 49 40	8 53 44	8 57 48	9 1 52
9	3	8 10 2	8 15 6	8 19 10	8 23 14	8 27 18	8 31 22	8 35 26	8 39 30	8 43 34	8 47 38	8 51 42	8 55 46	8 59 50	9 3 54

These Thickness Doors.

Four Thickness Doors.

Doors for Openings not exceeding 30ft. in area are constructed of three thicknesses; exceeding 30ft. four thicknesses of timber.

If the sides or head of doorway are built of half-timbered bricks, allow 1/2in. or 3/4in. instead of 1in. or 1 1/2in.

If one half is fitted with Automatic Apparatus for Self-Closing in case of Fire, 20/- per door extra.  
If both halves are fitted with " " " " 30/- " "

The above prices include the Door constructed as stated in general description (see page 8) with two or three (according to height of Door) strong ornamental Malleable Iron Handles, Steel Gudgeons with Turned Steel Pins, Top and Bottom Bolt Attachment for left hand leaf, with Top and Bottom Recovers and Turned Bolts for left hand leaf with Top and Bottom Recovers, and all Bolts for attaching these Fittings to the Doors.

N.B.—Armoured Doors meet the regulations of the Fire Officers' Committee for openings of an area of 30 superficial square feet; this being the maximum size of opening allowed for fire doors.

For Doors to London County Council requirements in party walls, special fittings are required entailing a slight extra cost.





## **ANOTHER FINE SAVE.**

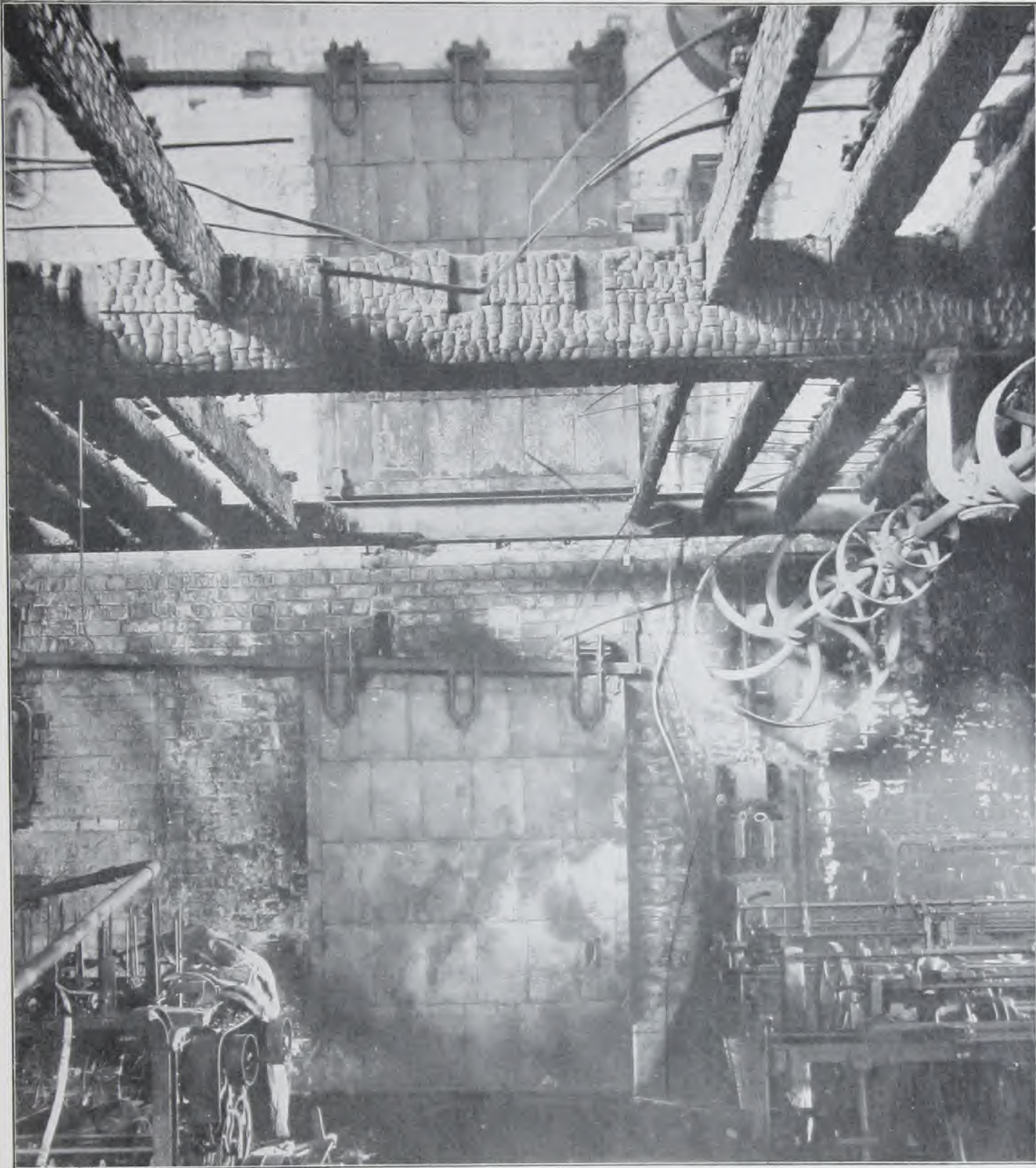
Armoured Fire Doors save buildings and contents worth £45,000.



The above illustration taken from an actual photograph shows the "burnt out" and "saved" portions of the premises of Messrs. S. D. Stretton & Sons, Southgate Street, Leicester. The fire occurred in the left hand portion of the buildings but was stopped at the party-wall marked "X" by Fire Doors shown in the illustration on page 11.



**Doors at Messrs. Stretton & Sons' premises.**



Messrs. S. D. Stretton & Sons, Leicester, in writing to us on January 27th, 1914, state:—"We are writing you to tell you how pleased we are with the Fire-resisting Doors which you supplied to us a few months ago. No doubt you are aware that we had a fire on Sunday morning last, and these Doors prevented the fire from entering the adjoining portion of our factory. There was only one door on each floor, but there is no doubt that, instead of an approximate £15,000 loss, it would have been four times this amount had these doors not been there."



## **ARMoured FIRE DOORS**

DRURY LANE THEATRE.



The Armoured Fire Doors in the above illustration were the means of saving all Store Rooms, Workshops and Scene Docks, etc., beyond the wall shown, the openings in which they covered.

These Doors were installed by MATHER & PLATT, Ltd., in 1889, and were the only Fire Doors that successfully resisted the fire that occurred on March 25th, 1908, at the above Theatre.



**Fire at Drury Lane Theatre.**



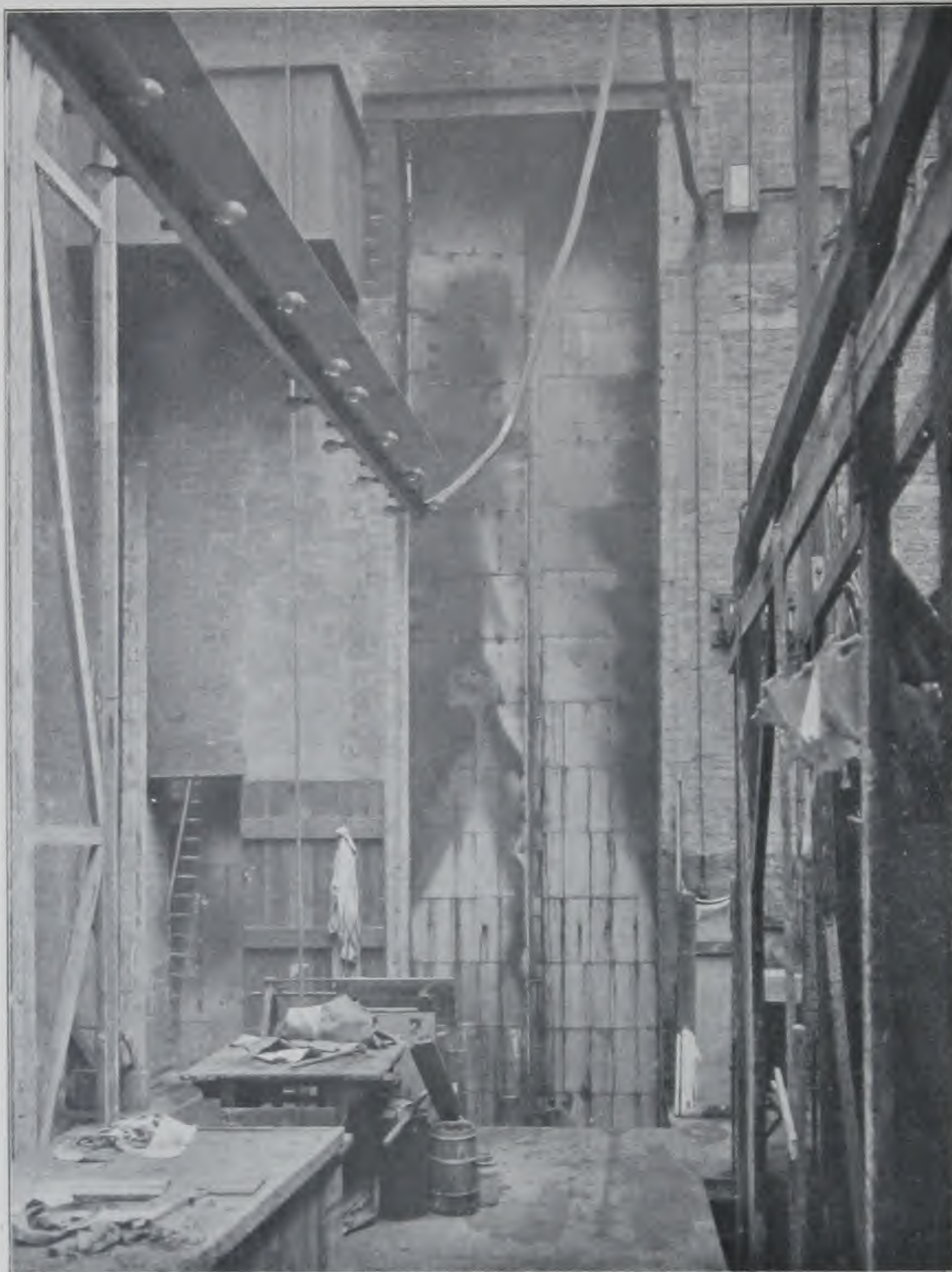
**This illustrates Folding Door on Ground Floor opening  
into Property Room.**

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Mr. Philip E. Pilditch, Consulting Architect to the Bedford Estate and to the Theatre Royal, Drury Lane, expressed himself, in a letter we have received, as highly satisfied with the behaviour of the Fire Doors in the recent fire.



**Fire at Drury Lane Theatre.**



This illustrates Folding Door to Scene Painting Room. View of door taken from the inside of Scene Room saved.

This door measures 25 feet high by 6 feet 6 inches wide, and although it was subjected to great heat, it successfully prevented the fire from penetrating into the Scene Painting Room.



**Mather & Platt, Ltd.**

## **Patent "STRYP" Fire Door.**

Only 1½ in. thick and requiring no frame.

A new Fire Door, of excellent appearance and highest efficiency.



D318

With Special Automatic Apparatus for Self-closing in case of fire.

**ACCEPTED BY ALL BRITISH INSURANCE COMPANIES.**

In the tests that were made before the officials of the Fire Offices' Committee these doors have successfully withstood a temperature of 2600° Fahr. for several hours.

"Applications for use of 'Stryp' Doors for party wall openings under the London County Council (General Powers) Act, 1908, Section 18, submitted to the Council are favourably considered.

**Special Prices on application.**



**PATENT**

**“STRYP” FIRE DOOR.**

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Despite the magnificent record of Armoured Fire Doors as enumerated in the preceding pages, a demand has arisen during the last two or three years for a reliable Fire Door of a thinner and more ornamental type than the Armoured Door.

This demand has resulted in a number of Fire Doors constructed of Steel Sheets and Asbestos being put on the market, but hitherto no Doors have been constructed of these materials that would of themselves withstand the effects of a severe fire without so much warping and twisting as to make them worse than useless for fire-resisting purposes.

To prevent this as much as possible it has always been necessary to use some kind of frame to which the Door is fixed, or into which it slides, and whilst this is fairly satisfactory up to a certain point, if the fire continues the frame itself becomes distorted and allows the fire to pass through the opening.

Having carefully considered this demand for a thinner and more ornamental Door, we made a series of experiments and tests, and eventually brought forward the **“Stryp” Fire Door.**

The **Patent Steel “Stryp” Fire Door** herein illustrated, embodies a novel feature of the greatest importance.

It is constructed on the sliding principle, consequently the temperature may be raised to white heat on one face only, or on both, without causing serious distortion. Moreover, if whilst in this condition a powerful stream of water from a hose pipe is directed upon it, and the metal is suddenly cooled, the Door will still continue to lie flat against the wall, and this being so no frame is necessary.

A most important feature of the construction of our **Patent Steel “Stryp” Fire Door**, and one which we feel sure will forcibly appeal to everyone who has given the subject of the prevention of the spread of fire any attention, is the cellular construction; namely, the air spaces between both the inner and the outer faces of the Door.

These air spaces retard the transmission of heat from one side of the Door to the other, so that, whilst there may be a fierce fire raging on one side, the other side remains comparatively cool, thus reducing the risk of the fire being transmitted from one side of the Door to the other to a minimum.



## Details of Construction.

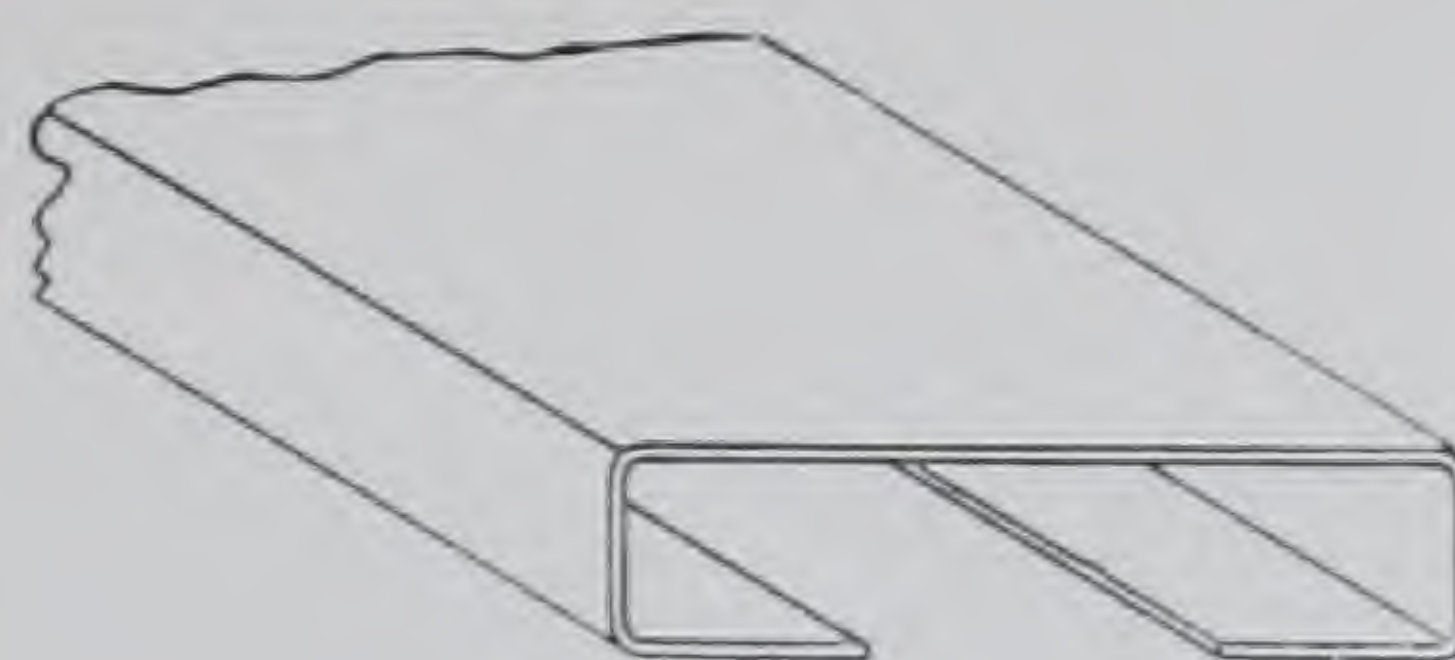


Figure 1.



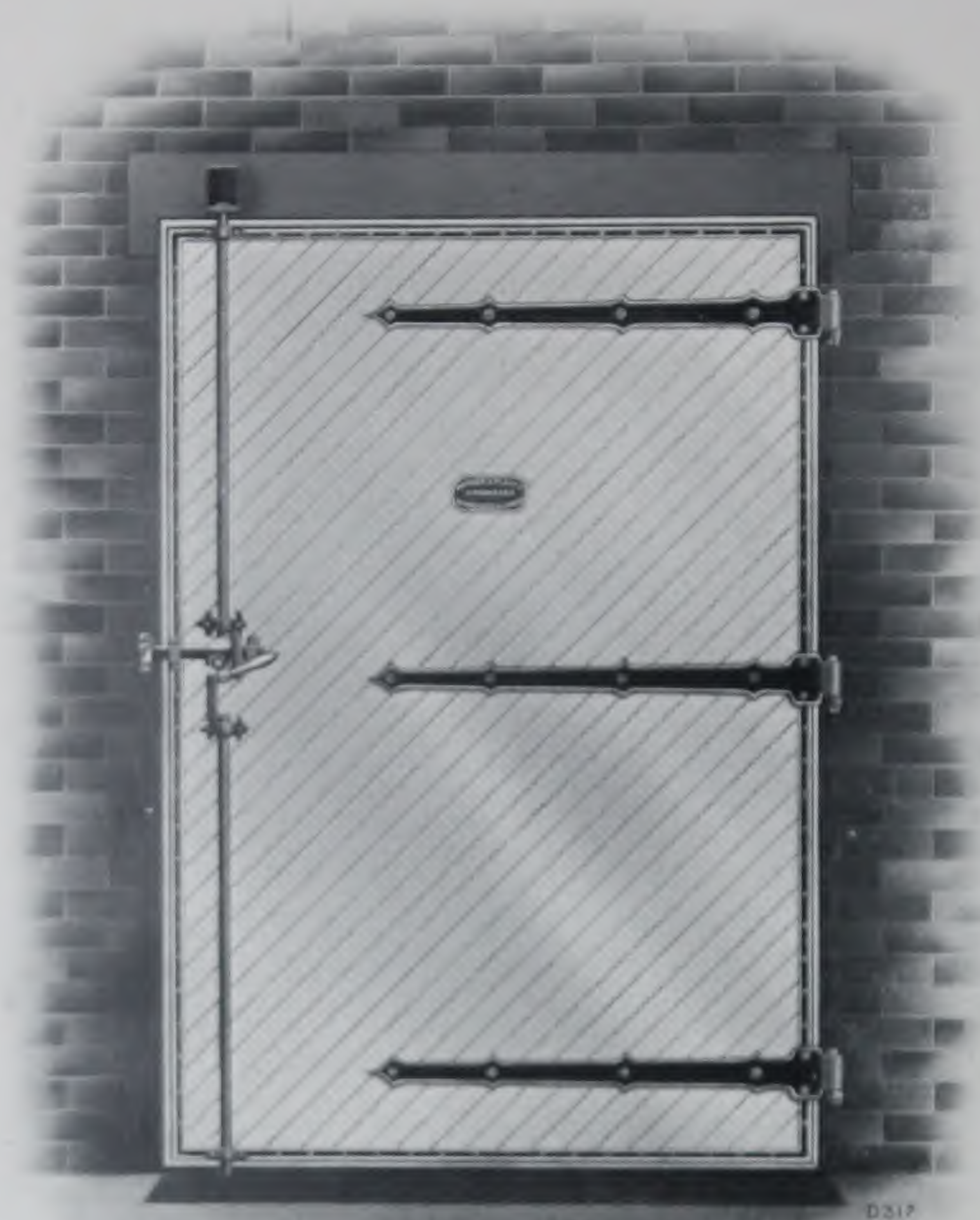
Figure 2.

The door itself consists of three main parts—the fire-proof centre, the metal strip faces, and the casing. The fire-proof centre is composed of one or two thicknesses of hard asbestos slate; the outer faces of the door are made of hollow strips of lead coated steel, of the section shown in Fig. 1, which are placed side by side, at an angle of 45 degrees with the edge of the door, as shown in Fig. 2, those on one side being at right angles to those on the other; the casing is made of very light channel iron, and serves the purpose of binding the whole together. Rivets pass through the casing at the ends of each strip, and rivets and washers are used to bind the strips on one side to those on the other side in the body of the door, as shown in the illustration. These latter rivets **do not pass through the strips themselves, but through iron washers which press against the flanges of the inner side of the strips and hold them firmly together without interfering with their freedom to expand under heat.**

These doors have been submitted to the most severe fire tests by the officials of the Fire Offices' Committee, and as a result they are now accepted by all British Insurance Companies. With the single exception of the Armoured Fire Door, **these are the only ones, without frames, which they have passed.**



## **Patent "Stryp" Hinged Door.**



In the tests that were made before the officials of the  
**FIRE OFFICES' COMMITTEE**  
these doors have successfully withstood a temperature  
of 2600° Fahr. for several hours.

*"Applications for use of 'Stryp' Doors for party wall openings under the London County Council  
(General Powers) Act, 1908, Section 18, submitted to the Council are favourably considered."*



## **Patent "Stryp" Folding Door.**



**Specially suitable for Lift Opening and Fire Chambers.**

**Have been tested up to and successfully withstood a temperature of 2600° F.**

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"Applications for use of 'Stryp' Doors for party wall openings under the London County Council (General Powers) Act, 1908, Section 18, submitted to the Council are favourably considered."



## TEXTILE DEPARTMENT

Patent Gas Singeing Machines (Binder's Patent).  
Mather Patent Kier.  
Complete Open Width Piece Bleaching Plant,  
Mercerising Machines.  
Single and Double Side Printing Machines.  
Automatic Steaming and Ageing Chambers.  
High-speed Stentering Machines with self-feeding clips.  
High-speed Beetling Machines.  
Calenders of every Description.  
Patent Cop and Cheese Dyeing Machines.  
Dyeing Machines for Loose Wool and Cotton.  
Dyeing and Finishing Machinery for Silk.  
Dyeing and Finishing Machinery for Velvets.  
Warp Stop Motion for Looms.  
"Vortex" System of Humidification and Ventilation.

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"P" Type Direct Current Dynamos.  
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Motor Generators.  
Train-Lighting Dynamos.  
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Water-Softening Plants.  
Schemes for the Purification of Works Effluent.

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Patent Turbine Pumps for High Lifts.  
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## FIRE DEPARTMENT

"Grinnell" Automatic Sprinkler and Fire Alarm.  
"Underwriter" Fire Pumps.  
Armoured Fire Doors.  
"Stryp" Fire Doors.  
Fire Hydrants, Hose, and Appliances.  
"Simplex" Chemical Fire Extincteurs.  
Turbine Fire Pumps.  
Valves and Taps for General Purposes.  
Standardised Cast-iron Tanks.

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